



Framework for Defining and Documenting Natural Conditions: Interim Document

Summary

EPA has published online a *Framework for Defining and Documenting Natural Conditions for Development of Site-Specific Natural Background Water Quality Criteria for Temperature, Dissolved Oxygen and pH to Protect Aquatic Life Uses: Interim Document*.

This "Natural Conditions Framework" addresses the need for clarity and direction in establishing site-specific water quality criteria set equal to natural background conditions by states, territories and authorized tribes.

This document is intended as an interim framework to assist our governmental partners in developing a consistent, transparent and scientifically-defensible approach for identifying and characterizing natural conditions. This approach provides one method to inform their development of site-specific criteria for temperature, dissolved oxygen and pH to protect aquatic life. The framework succinctly outlines a procedure that states, territories and authorized tribes can use for the development of water quality criteria based on natural background concentrations for these three parameters. The interim framework will be subject to external peer review and finalized by early 2016.

What is a Natural Background Condition?

EPA defines natural background to be a background concentration due only to non-manmade sources. EPA's current national policy allows states, territories and authorized tribes to establish site-specific natural background aquatic life criteria by setting the criteria value equal to natural background.

Overview of Methods that Define and Document Natural Conditions

The natural condition for a water quality parameter (such as temperature, pH or dissolved oxygen) is characterized by analyzing data

relevant to a specific situation. Those data are subsequently used to establish site-specific criteria applicable to that particular situation.

There are five general steps to the process:

- 1) Determine the need for a natural background criterion;
- 2) Determine whether non-attainment of the state-wide water quality criterion is due to natural processes;
- 3) Determine the spatial and temporal boundaries of the natural condition;
- 4) Calculate a site-specific natural background criterion;
- 5) Adopt site-specific natural background criterion.

For More Information

Visit EPA's Water Quality Standards Policy and Guidance Reference Library website at: <http://water.epa.gov/scitech/swguidance/standards/library/> or send an email to Danielle Anderson at anderson.danielle@epa.gov.